

Challenges and Opportunities in Drug Demand Reduction: What We Have Learned From Research

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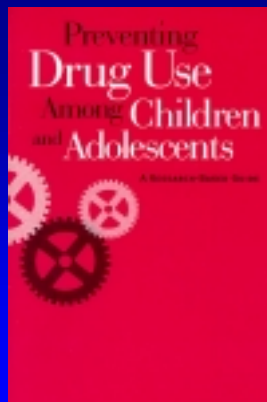
U.S. - Mexico High Level Contact Group
Third Bi-National Drug Demand Reduction Conference
Phoenix, Arizona
June 1, 2000

Advances in Science Have Revolutionized Our Fundamental Views of Drug Abuse and Addiction

Drug Abuse is a Preventable Behavior Drug Addiction is a Treatable Disease

Partnership for a Drug Free America

Why Do People Take Drugs In The First Place?



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National Institute on Drug Abuse

www.drugabuse.gov

Prevention Programs Should Reduce Risk Factors

- ✓ ineffective parenting
- ✓ chaotic home environment
- ✓ lack of mutual attachments/nurturing
- ✓ inappropriate behavior in the classroom
- ✓ failure in school performance
- ✓ poor social coping skills
- ✓ affiliations with deviant peers
- ✓ perceptions of approval of drug-using behaviors in the school, peer, and community environments

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Prevention Programs Should

Enhance Protective Factors

- ✓ strong family bonds
- ✓ parental monitoring
- ✓ parental involvement
- ✓ success in school performance
- ✓ prosocial institutions (e.g. such as family, school, and religious organizations)
- ✓ conventional norms about drug use

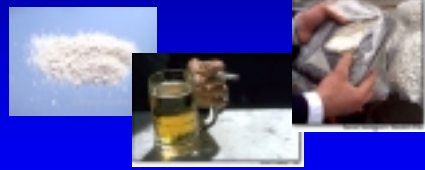


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Prevention Programs Should

Target all Forms of Drug Use



. . . and be Culturally Sensitive

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Prevention Programs Should

Include Interactive Skills-Based Training

- ✓ Resist drugs
- ✓ Strengthen personal commitments against drug use
- ✓ Increase social competency
- ✓ Reinforce attitudes against drug use

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Prevention Programs Should be

Family-Focused

- ✓ Provides greater impact than parent-only or child-only programs
- ✓ Include at each stage of development
- ✓ Involve effective parenting skills

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Prevention Programs Should

Involve Communities and Schools

- ✓ Media campaigns and policy changes
- ✓ Strengthen norms against drug use
- ✓ Address specific nature of local drug problem

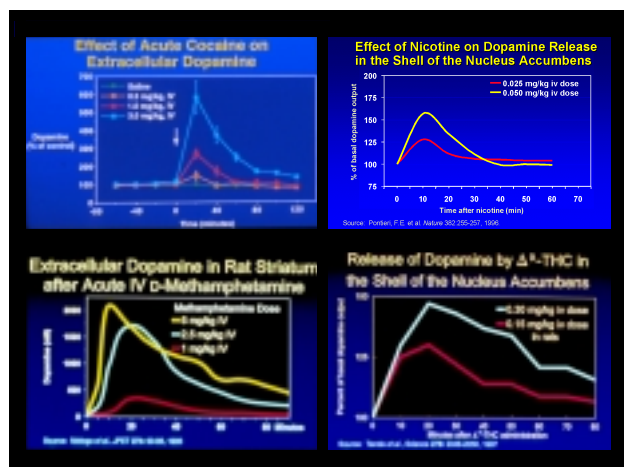
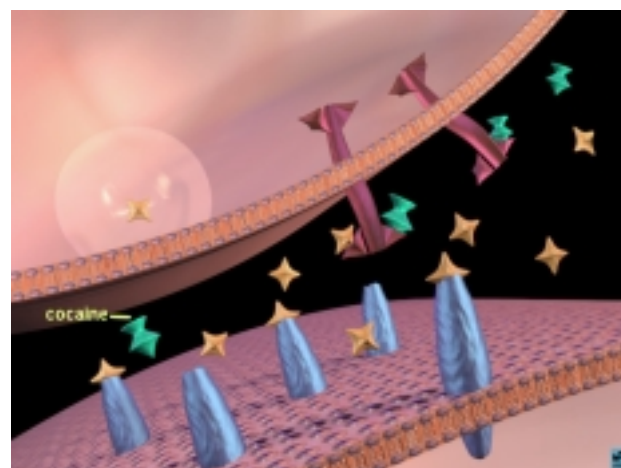
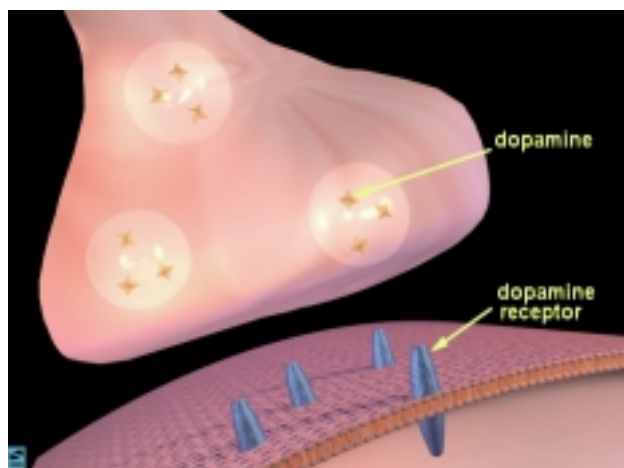
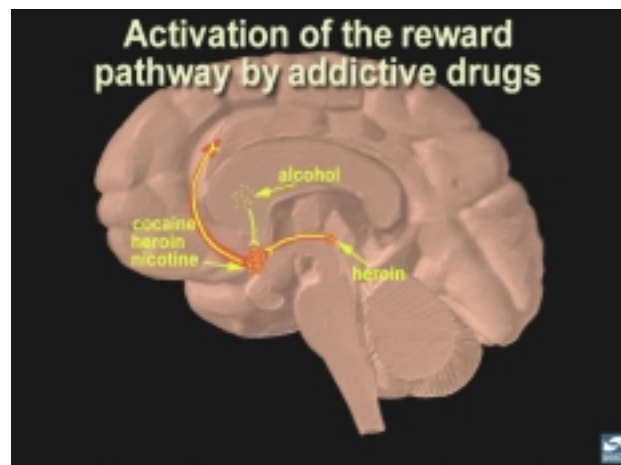
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People Take Drugs To:

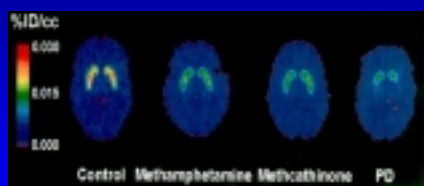
- **Feel good (sensation seeking)**
- **Feel better (self-medication)**

A Major Reason People Take a Drug is They Like What it Does to Their Brains

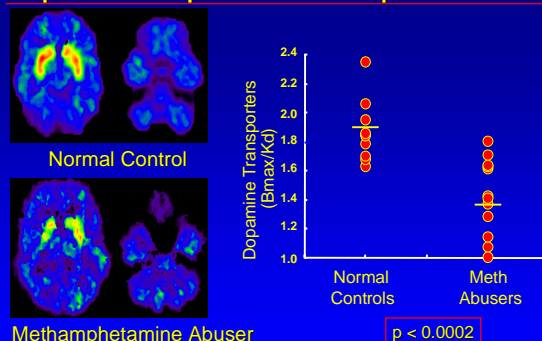


Prolonged Drug Use Changes The Brain In Fundamental and Long-Lasting Ways

Methamphetamine Neurotoxicity



Dopamine Transporters in Methamphetamine Abusers



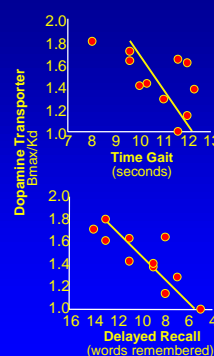
Methamphetamine abusers have significant reductions in dopamine transporters.

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What We Have Learned From Research

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Dopamine Transporters in Methamphetamine Abusers



Motor Task

Loss of dopamine transporters in the meth abusers may result in slowing of motor reactions

Memory Task

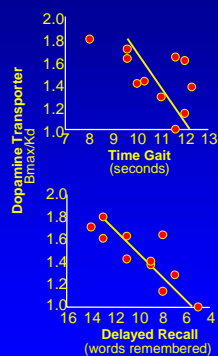
Loss of dopamine transporters in the meth abusers may result in memory impairment.

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Addiction Results from
Long-Term Effects of Drugs
on the Brain

The Brains of Addicts
Are Different From
the Brains of Non-Addicts
...And Those Differences
Are An Essential Element
of Addiction

Dopamine Transporters in Methamphetamine Abusers



Motor Task

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Memory Task

Loss of dopamine transporters in the meth abusers may result in memory impairment.

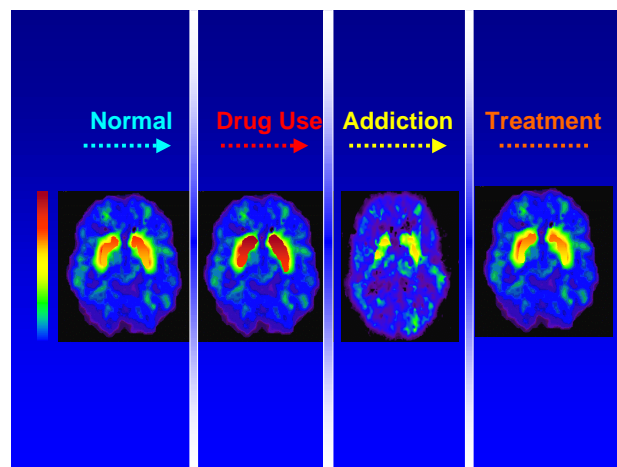
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**Addiction Results from
Long-Term Effects of Drugs
on the Brain**

**Addiction is, Fundamentally,
a Brain Disease**

**Addiction is Not
Just a Brain Disease**

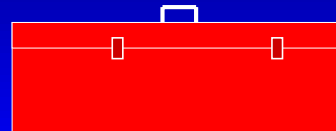
**Addiction is the
Quintessential
Biobehavioral Disorder**



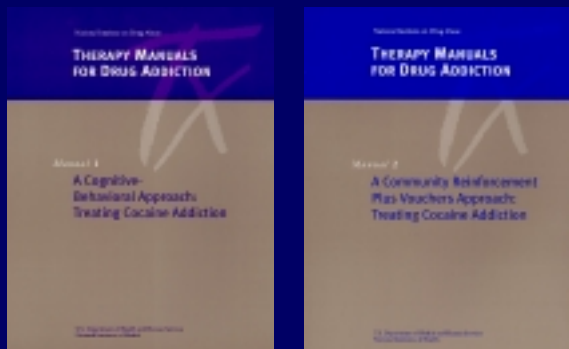
The Most Effective Treatment Strategies Will Attend to All Aspects of Addiction:

- Biology
- Behavior
- Social Context

We Have A Variety Of Effective Treatment Options In The Clinical Toolbox



NIDA THERAPY MANUALS



Medications for Drug Addiction

- ✓ Methadone
- ✓ LAAM
- ✓ Naltrexone
- ✓ Nicotine Replacement
 - patches
 - gum
 - bupropion

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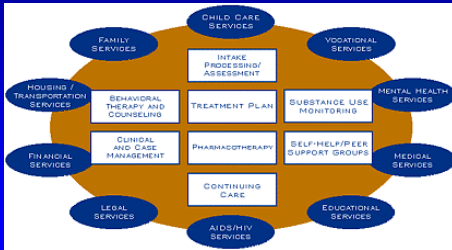
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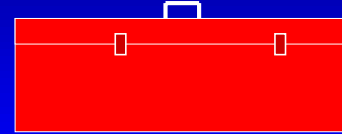
Components of Comprehensive Drug Addiction Treatment



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We Have A Variety Of Effective Treatment Options In The Clinical Toolbox

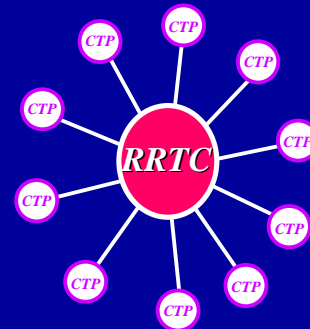


...But We Need To And Can Do Better

Clinical Trials Network

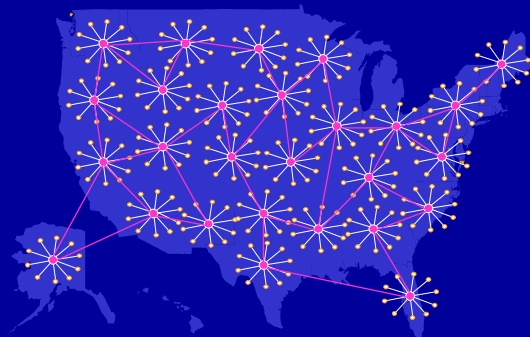
- Infrastructure based on NIH model
- Test effectiveness in real-life settings
- Behavioral and medications treatment
- Diverse populations
- Partnership with community treatment programs

National Drug Abuse Treatment Clinical Trials Network Node



RRTC -- Regional Research and Training Center
CTP -- Community-Based Treatment Program

National Drug Abuse Treatment Clinical Trials Network



We've Come A Long Way in Replacing

